

WE CLAIM:

1. An automated speech recognition filter, comprising:
  - 5 means for determining one or more models representative of a signal degradation of a first speech signal transmitted from a transceiver to said automated speech recognition filter; and
  - means for providing a second speech signal as a function of the one or more models, the second speech signal being an approximation of the
  - 10 first speech signal.
2. An automated speech filtering device, comprising:
  - means for determining one or more models representative of a signal degradation of a first speech signal transmitted from a transceiver to said
  - 15 automated speech recognition filtering device; and
  - means for providing a second speech signal as a function of one or more models, the second speech signal being an approximation of the first speech signal; and
  - a database operable to store a user profile corresponding to the
  - 20 first set of one or more models.

3. An automated speech recognition system, comprising:
  - means for determining one or more models representative of a signal degradation of a first speech signal transmitted from a transceiver to said
  - 5 automated speech recognition system, and
  - means for providing a second speech signal as a function of the one or more models, the second speech signal being an approximation of the first speech signal; and
  - an automated speech recognition platform operable to provide an
  - 10 audio signal in response to a reception of the second speech signal, the audio signal corresponding to a context of the first speech signal.
4. An automated speech recognition filtering method, comprising:
  - determining one or more models representative of a signal
  - 15 degradation of a first speech signal transmitted from a transceiver; and
  - providing a second speech signal as a function of the one or more models, the second speech signal being an approximation of the first speech signal.
- 20 5. An automated speech recognition filtering device, comprising:
  - a database operable to store a user profile corresponding to a transceiver, the user profile including a first variable indicative of an identification of the transceiver; and
  - an automated speech recognition filter operable to determine a
  - 25 transceiver transmission model in response to a reception of the first variable, the transceiver transmission model being representative of a first signal degradation on a first speech signal by the transceiver.

6. The automated speech recognition filtering device of claim 5,  
further comprising:

a noise discrimination module operable to provide a noise  
5 discrimination signal in response to a reception of the first speech signal by said  
automated speech recognition filtering device,  
wherein said automated speech recognition filter is further operable  
to provide a second speech signal as a function of the transceiver transmission  
model and the noise discrimination signal.

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7. The automated speech recognition filtering device of claim 5,  
further comprising:

a noise suppression module operable to provide a second speech  
signal in response to a reception of the first speech signal by said automated  
15 speech recognition filtering device, the second speech signal being a product of  
an attenuation of a noise component from the first speech signal,  
wherein said automated speech recognition filter is further operable  
to provide a third speech signal as a function of the transceiver transmission  
model and the second speech signal.

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8. The automated speech recognition filtering device of claim 5,  
wherein

said automated speech recognition filter is further operable in  
response to a reception of the first variable to determine a transceiver reception  
25 model representative of a second signal degradation of the first speech signal by  
the transceiver.

9. The automated speech recognition filtering device of claim 8,  
further comprising:

a noise discrimination module operable to provide a noise  
5 discrimination signal in response to a reception of the first speech signal by said  
automated speech recognition filtering device,  
wherein said automated speech recognition filter is further operable  
to provide a second speech signal as a function of the transceiver transmission  
model, the transceiver reception model, and the noise discrimination signal.

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10. The automated speech recognition filtering device of claim 8,  
further comprising:

a noise suppression module operable to provide a second speech  
signal in response to a reception of the first speech signal by said automated  
15 speech recognition filtering device, the second speech signal being a product of  
an attenuation of a noise component from the first speech signal,  
wherein said automated speech recognition filter is operable to  
provide a third speech signal as a function of the transceiver transmission model,  
the transceiver reception model, and the second speech signal.

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11. The automated speech recognition filtering device of claim 5,  
wherein:

the user profile further includes a second variable indicative of an  
identification of wireless network within a transmission signal path between the  
25 transceiver and said automated speech recognition filtering device; and  
said automated speech recognition filter is further operable to  
determine a wireless transmission model in response to a reception of the  
second variable, the wireless transmission model being representative of a  
second signal degradation of the first speech signal along the transmission signal  
30 path by the wireless network.

12. The automated speech recognition filtering device of claim 11,  
further comprising:

5 a noise discrimination module operable to provide a noise  
discrimination signal in response to a reception of the first speech signal by the  
automated speech recognition filtering device,

wherein said automated speech recognition filter is further operable  
to provide a second speech signal as a function of the transceiver transmission  
model, the wireless transmission model, and the noise discrimination signal.

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13. The automated speech recognition filtering device of claim 11,  
further comprising:

15 a noise suppression module operable to provide a second speech  
signal in response to a reception of the first speech signal by said automated  
speech recognition filtering device, the second speech signal being a product of  
an attenuation of a noise component from the first speech signal,

wherein said automated speech recognition filter is further operable  
to provide a third speech signal as a function of the transceiver transmission  
model, the wireless transmission model, and the second speech signal.

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14. The automated speech recognition filtering device of claim 5,  
wherein:

25 the user profile further includes a second variable indicative of an  
identification of wireless network within a reception signal path between the  
transceiver and said automated speech recognition filtering device;

30 said automated speech recognition filter is further operable to  
determine a wireless reception model in response to a reception of the second  
variable, the wireless reception model representative of a second signal  
degradation of the first speech signal along the reception signal path by the  
wireless network.

15. The automated speech recognition filtering device of claim 14,  
further comprising:

5 a noise discrimination module operable to provide a noise  
discrimination signal in response to a reception of the first speech signal by said  
automated speech recognition filtering device,  
wherein said automated speech recognition filter is further operable  
to provide a second speech signal as a function of the transceiver transmission  
model, the wireless reception model, and the noise discrimination signal.

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16. The automated speech recognition filtering device of claim 14,  
further comprising:

15 a noise suppression module operable to provide a second speech  
signal in response to a reception of the first speech signal by said automated  
speech recognition filtering device, the second speech signal being a product of  
an attenuation of a noise component from the first speech signal,  
wherein said automated speech recognition filter is further operable  
to provide a third speech signal as a function of the transceiver transmission  
model, the wireless reception model, and the second speech signal.

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17. The automated speech recognition filtering device of claim 5,  
wherein:

25 the user profile further includes a second variable indicative of an  
identification of wireline network within a transmission signal path between the  
transceiver and said automated speech recognition filtering device;  
said automated speech recognition filter is further operable to  
determine a wireline transmission model in response to a reception of the second  
variable, the wireline transmission model being representative of a second signal  
degradation of the first speech signal along the transmission signal path by the  
30 wireline network.

18. The automated speech recognition filtering device of claim 17,  
further comprising:

5 a noise discrimination module operable to provide a noise  
discrimination signal in response to a reception of the first speech signal by said  
automated speech recognition filtering device,  
wherein said automated speech recognition filter is further operable  
to provide a second speech signal as a function of the transceiver transmission  
model, the wireline transmission model, and the noise discrimination signal.

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19. The automated speech recognition filtering device of claim 17,  
further comprising:

15 a noise suppression module operable to provide a second speech  
signal in response to a reception of the first speech signal by said automated  
speech recognition filtering device, the second speech signal being a product of  
an attenuation of a noise component from the first speech signal,  
wherein said automated speech recognition filter is further operable  
to provide a third speech signal as a function of the transceiver transmission  
model, the wireline transmission model, and the second speech signal.

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20. The automated speech recognition filtering device of claim 5,  
wherein:

25 the user profile further includes a second variable indicative of an  
identification of wireline network within a reception signal path between the  
transceiver and said automated speech recognition filtering device;

30 said automated speech recognition filter is further operable to  
determine a wireline reception model in response to a reception of the second  
variable, the wireline reception model being representative of a second signal  
degradation of the first speech signal along the reception signal path by the  
wireline network.

21. The automated speech recognition filtering device of claim 20,  
further comprising:

5 a noise discrimination module operable to provide a noise  
discrimination signal in response to a reception of the first speech signal by said  
automated speech recognition filtering device,  
wherein said automated speech recognition filter is further operable  
to provide a second speech signal as a function of the transceiver transmission  
model, the wireline reception model, and the noise discrimination signal.

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22. The automated speech recognition filtering device of claim 20,  
further comprising:

15 a noise suppression module operable to provide a second speech  
signal in response to a reception of the first speech signal by said automated  
speech recognition filtering device, the second speech signal being a product of  
an attenuation of a noise component from the first speech signal,  
wherein said automated speech recognition filter is further operable  
to provide a third speech signal as a function of the transceiver transmission  
model, the wireline reception model, and the second speech signal.

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23. The automated speech recognition filtering device of claim 5,  
wherein:

25 the user profile further includes a second variable indicative of an  
identification of a vehicle having said transceiver therein;  
said automated speech recognition filter is further operable to  
determine one or more acoustical models in response to a reception of the  
second variable, the one or more acoustical models being representative of a  
second signal degradation of the first speech signal by the vehicle.



24. The automated speech recognition filtering device of claim 23,  
further comprising:

5 a noise discrimination module operable to provide a noise  
discrimination signal in response to a reception of the first speech signal by said  
automated speech recognition filtering device,  
wherein said automated speech recognition filter is further operable  
to provide a second speech signal as a function of the one or more acoustical  
models, the transceiver transmission model, and the noise discrimination signal.

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25. The automated speech recognition filtering device of claim 23,  
further comprising:

15 a noise suppression module operable to provide a second speech  
signal in response to a reception of the first speech signal by said automated  
speech recognition filtering device, the second speech signal being a product of  
an attenuation of a noise component from the first speech signal,  
wherein said automated speech recognition filter is further operable  
to provide a third speech signal as a function of the one or more acoustical  
models, the transceiver transmission model, and the second speech signal.

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26. The automated speech recognition filtering device of claim 5,  
further comprising:

25 a noise discrimination module operable to provide a noise  
discrimination signal in response to a reception of the first speech signal by said  
automated speech recognition filtering device,  
wherein said automated speech recognition filter is further operable  
to receive an audio signal from an automated speech recognition platform, and  
wherein said automated speech recognition filter is further operable  
to provide a second speech signal as a function of the transceiver transmission  
30 model, the noise discrimination signal, and the audio signal.

27. The automated speech recognition filtering device of claim 5,  
further comprising:

- 5 a noise suppression module operable to provide a second speech  
signal in response to a reception of the first speech signal by said automated  
speech recognition filtering device, the second speech signal being a product of  
an attenuation of a noise component from the first speech signal,  
wherein said automated speech recognition filter is further operable  
to receive an audio signal from an automated speech recognition platform, and  
10 wherein said automated speech recognition filter is operable to  
provide a third speech signal as a function of the transceiver transmission model,  
the second speech signal, and the audio signal.

28. A method of processing voice commands spoken into a first transceiver and transmitted over a first wireless network, said method comprising:

5 storing a plurality of processing functions, wherein each processing function optimizes voice recognition characteristics for a discrete set selected from at least one of a plurality of transceivers, a plurality of wireless networks and a plurality of wireless network components,

wherein the first transceiver is one of the plurality of transceivers  
10 and wherein the first wireless network is one of the plurality of wireless networks;  
receiving a signal having an identifying data component,

wherein the identifying data component indicates at least one of (a) first frequency response characteristics of the first transceiver, and (b) second frequency response characteristics of the wireless network; and

15 responsive to the identifying component, selecting from the plurality of processing functions a selected processing function,

wherein the selected processing function optimizes processing of the spoken voice commands for at least one of the first transceiver and the first wireless network.

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29. A method of processing voice commands spoken into a first transceiver and transmitted over a first wireless network, said method comprising:

- 5 storing a plurality of processing functions, wherein each processing function optimizes voice recognition characteristics for a discrete set selected from at least one of a plurality of transceivers, a plurality of wireless networks and a plurality of wireless network components,
  - wherein the first transceiver is one of the plurality of transceivers
  - 10 and wherein the first wireless network is one of the plurality of wireless networks;
  - receiving a signal having an identifying characteristic,
    - wherein the identifying characteristic indicates at least one of (a) first frequency response characteristics of the first transceiver, and (b) second frequency response characteristics of the first wireless network or components
    - 15 thereof; and
    - responsive to the identifying characteristic, selecting from the plurality of processing functions a selected processing function,
      - wherein the selected processing function optimizes processing of the spoken voice commands for at least one of the first transceiver and the first
      - 20 wireless network.